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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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NIXON & VANDERHYE PC
1100 NORTH GLEBE ROAD 8TH FLOOR
ARLINGTON, VA 22201

EXAMINER

SMITH, SHEILA B

ART UNIT	PAPER NUMBER
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2681

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DATE MAILED: 06/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/441,883

Applicant(s)

ANDERSSON ET AL.

Examiner

Sheila B. Smith

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 3/19/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-91 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-91 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4.6</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andersson et al. (U.S. Patent Number 6,519,461) in view of Tokura et al. (U.S. Patent Number 5,400,329).

Regarding claims 1, 28, 80, 81, 84, 85, Andersson et al. discloses all of the claimed invention as set forth in the instant application, additionally Andersson et al. discloses a channel-type switching from a common channel to a dedicated channel based on common channel load, further Andersson et al. discloses a mobile telecommunications system comprising at least one node (18,20) through which a packet switched data session is established between a user equipment unit (30) and a data network (12-14), and wherein the node (which reads on "a communication channel allocation entity" as disclosed in column 5 line 48), makes a determination if a channel switch for the session and implements a channel switch in accordance with the determination (which reads on column 3 lines 55-65), however Andersson et al. fails to disclose the use of acceleration of packet transmission rate.

In the same field of endeavor, Tokura et al. further discloses packet network and method for congestion avoidance in packet networks. In addition Tokura et al. discloses acceleration of packet transmission rate as disclosed in column 3 lines 9-15.

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Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to improve Andersson et al. by modifying a channel-type switching from a common channel to a dedicated channel based on common channel load with a acceleration of packet transmission rate as taught by Tokura et al. for the purpose of having effective packet transmission control.

Regarding claims 2,16,29,43,56,70 Andersson et al. in view of Tokura et al. discloses everything claimed, as applied above (see claims 1) in addition Andersson et al. discloses wherein the node (which reads on “a communication channel allocation entity” as disclosed in column 5 line 48) switches channel types for the session in accordance with the determination (which reads on column 3 lines 55-65).

Regarding claims 3,17,30,44,57,71, Andersson et al. in view of Tokura et al. discloses everything claimed, as applied above (see claims 1) in addition Andersson et al. discloses the node (which reads on “a communication channel allocation entity” as disclosed in column 5 line 48) switches the session from a common traffic channel to a dedicated traffic channel in accordance with the determination (which reads on column 3 lines 55-65).

Regarding claims 4,18,31,45,58,72, Andersson et al. in view of Tokura et al. discloses everything claimed, as applied above (see claims 1) in addition Andersson et al. discloses the node (which reads on “a communication channel allocation entity” as disclosed in column 5 line 48) switches the session from a dedicated traffic channel having a first transmission rate to a

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dedicated traffic channel having a second transmission rate (which reads on column 3 line 35-39), in accordance with the determination (which reads on column 3 lines 55-65).

Regarding claims 5, 19,32,46,59,73, Andersson et al. in view of Tokura et al. discloses everything claimed, as applied above (see claims 1) in addition Andersson et al. discloses the node (which reads on “a communication channel allocation entity” as disclosed in column 5 line 48) makes the determination at a beginning of the session (which reads on column 5 line 48-50).

Regarding claims 6,20,33,47,60,74, Andersson et al. in view of Tokura et al. discloses everything claimed, as applied above (see claims 1) in addition Andersson et al. discloses the node(which reads on “a communication channel allocation entity” as disclosed in column 5 line 48) makes the determination when throughput of the packets reaches a packet speed threshold (which reads on column 2 line 58-61).

Regarding claims 7,21,34,48,61,75, Andersson et al. in view of Tokura et al. discloses everything claimed, as applied above (see claims 1) in addition Andersson et al. discloses the node makes the determination by 2 comparing a derivative of the packet transmission rate at the packet speed threshold 3 with a predetermined acceleration threshold (which reads on column 6 line 55-58).

Regarding claims 8,22,35,49,63,77, Andersson et al. in view of Tokura et al. discloses everything claimed, as applied above (see claims 1) in addition Andersson et al. discloses the

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node (which reads on “a communication channel allocation entity” as disclosed in column 5 line 48) makes the determination upon detection of a predetermined pattern of interval time lengths between receipt times of packets (which reads on column 2 line 23-28).

Regarding claims 9,23,36,50,63,77, Andersson et al. in view of Tokura et al. discloses everything claimed, as applied above (see claims 1) in addition Andersson et al. discloses the predetermined pattern of interval time 2 lengths between receipt times of packets is long-short-long-short justifies a channel switch for the session (which reads on column 6 line 55-58).

Regarding claims 10,24,37,51,64,78, Andersson et al. in view of Tokura et al. discloses everything claimed, as applied above (see claims 1) in addition Andersson et al. discloses the node (1) (which reads on “a communication channel allocation entity” as disclosed in column 5 line 48) makes a determination whether 2 the session is in a slow start phase and (2) switches channel for the session in accordance with whether the session is in a slow start phase (which reads on column 6 line 55-58).

Regarding claims 11,38,66, Andersson et al. in view of Tokura et al. discloses everything claimed, as applied above (see claims 1) in addition Andersson et al. discloses the node (1) (which reads on “a communication channel allocation entity” as disclosed in column 5 line 48) makes a determination whether a packet transmission rate of the session is indicative of a fast transmission-ramping protocol, and (2) switches channel for the session in accordance with the determination (which reads on column 3 lines 55-65).

Regarding claims 12,25,39,67,69,52, Andersson et al. in view of Tokura et al. discloses everything claimed, as applied above (see claims 1) in addition Andersson et al. discloses fast transmission-ramping protocol is transmission control protocol (TCP) (which reads on column 2 line 25-26).

Regarding claims 13, 26,40,65,53, Andersson et al. in view of Tokura et al. discloses everything claimed, as applied above (see claims 1) in addition Andersson et al. discloses the node (which reads on “a communication channel allocation entity” as disclosed in column 5 line 48) is a radio network controller node.

Regarding claims 14, 27,41,54, Andersson et al. in view of Tokura et al. discloses everything claimed, as applied above (see claims 1) in addition Andersson et al. discloses the mobile telecommunications system uses wideband code division multiple access (which reads on column 6 line 52).

Regarding claims 15,42,55,68, 82,83,86-91, Andersson et al. discloses a mobile telecommunications system comprising at least one node through which a packet switched data session is established between a user equipment unit and a data network, and wherein the node (1) (which reads on “a communication channel allocation entity” as disclosed in column 5 line 48) makes a determination whether a session is indicative of a fast transmission-ramping protocol, and (2) switches channel for the session in accordance with the determination (which

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reads on column 2 lines 45-50 and column 3 lines 55-65). However Andersson et al. fails to disclose the use of acceleration of packet transmission rate.

In the same field of endeavor, Tokura et al. further discloses packet network and method for congestion avoidance in packet networks. In addition Tokura et al. discloses acceleration of packet transmission rate as disclosed in column 3 lines 9-15.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to improve Andersson et al. by modifying a channel-type switching from a common channel to a dedicated channel based on common channel load with a acceleration of packet transmission rate as taught by Tokura et al. for the purpose of having effective packet transmission control.

Response to Arguments

2. Applicant's arguments with respect to claims 1-79 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheila B. Smith whose telephone number is (703)305-0104. The examiner can normally be reached on Monday-Thursday 6:00 am - 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Erika Gary can be reached on 703-308-0123. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JEAN GELIN
PATENT EXAMINER

S. Smith
June 1, 2004

S. Smith *jean* *Alfon* *Belin*